

What is claimed:

1. An ink jet system comprising:
an ink reservoir connected to an ink jet head;
means for causing ink flow from said reservoir to said
ink jet head; and
means for supplying ink to said reservoir independently
of actuation by said reservoir.

2. An ink jet system of claim 1 wherein said means
for causing ink flow comprises a flexible tube; and
means for applying pressure to said tube through a
pumping orbit from a static position out of squeezing
contact with said tube to a position of squeezing contact
with said tube.

3. An ink jet system of claim 1 wherein said means
for supplying ink to said reservoir independently of
actuation by said reservoir comprises a duplex coupler.

4. An ink jet system of claim 3 wherein said duplex
coupler of said means for supplying ink to said reservoir
independently of actuation by said reservoir comprises a
first separable component inserted completely into a second
component and locked in place.

5. An ink jet system of claim 3 wherein said duplex
coupler of said means for supplying ink to said reservoir
independently of actuation by said reservoir comprises a
first component inserted partially into a second component.

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6. An ink jet system of claim 3 wherein said duplex coupler of said means for supplying ink to said reservoir independently of actuation by said reservoir comprises a first component separated from a second component.

7. An ink jet system of claim 4 wherein said said first component and said second component both have a front end and a back end, a first portion and a second portion, with a front end of said first coupling member received in the second portion of said second coupling member.

8. An ink jet system of claim 4 wherein a poppet is reciprocally disposed in one component and acted upon by the other component to open a fluid passageway.

9. An ink jet system of claim 8 wherein said other component contains a fixed post.

10. An ink jet system of claim 8 a second poppet is reciprocally disposed in said other component, with a tip end of the first poppet and a tip end of said second poppet engaged against each other, forcing each other to open a fluid passageway between the component.

11. An ink jet system of claim 4 wherein a first spring is compressively received between a poppet and a back end of said first component, and second spring is compressedly received between a poppet and a back end of said second component;

whereby the springs bias the poppets forwardly when their tip ends are disengaged from each other when said first component is disconnected from said second component.

12. An ink jet system of claim 4 wherein said duplex valve of said means for supplying ink to said reservoir independently of actuation by said reservoir comprises

a first coupling member inserted into a second coupling member and locked in place;

at least one of the coupling members contains a poppet that closes when biased forwardly to seal the fluid passageway through the coupling member containing said poppet.

13. The method of operating an ink jet system, including the steps of:

(a) inserting one component of a two-component coupler in an ink reservoir; and

(b) inserting the other component of said two-component coupler into a replaceable ink bottle.

14. The method of claim 13 wherein said first component is partially inserted into said second component.

15. The method of claim 13 wherein said first component is lockingly inserted into said second component.

16. The method of claim 13 wherein said first component is inserted into said second component and a push button of one component is pushed to release the other component and seal a fluid passageway through the component that contains said push button.

Sub B' 17. Replaceable ink jet apparatus for an ink jet system, comprising

a container for ink-jet ink and having an outlet; and
a cap for sealing the outlet of said container until ink in a reservoir of an ink-jet system is to be replenished;

said cap comprising a base positionable upon said container and a hollow neck extending from from said base and having an exterior surface containing (1) a circumferential groove for receiving a locking collar when ink in a reservoir of an ink-jet system is to be replenished and (2) a taper beyond said circumferential groove for facilitating the entry of said locking collar into said groove.

18. Replaceable ink jet apparatus as defined in claim 17 wherein said container has ink-jet ink, said base is threaded upon said container and said cap seals said outlet until a reservoir of an ink-jet system is to be replenished.

19. Replaceable ink jet apparatus as defined in claim 17 wherein said neck contains a flow channel with a reciprocable poppet therein and means for biasing said poppet closed to prevent the flow of ink from said container until said container is needed to replenish ink in a reservoir of an ink-jet system.

20. A replaceable ink jet assemblage as defined in claim 17 wherein said poppet has a circumferential grommet for forming a circumferential seal.